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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/870,716      | 05/30/2001  | Hiroshi Urabe        | 71369-55968         | 8909             |

7590 11/21/2005

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Boston, MA 02209

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| EXAMINER |
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NUTTER, NATHAN M

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| ART UNIT | PAPER NUMBER |
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1711

DATE MAILED: 11/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/870,716

Applicant(s)

URABE ET AL.

Examiner

Nathan M. Nutter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-16 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

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### **DETAILED ACTION**

This application has been re-assigned to Examiner Nathan M. Nutter in Art Unit 1711. All inquiries regarding this application should be directed to Examiner Nutter at telephone number 571-272-1076.

#### ***Response to Amendment***

In view of the Response and amendment filed 22 August 2005, the following is being placed in effect.

The rejection of claims 1-9 under 35 U.S.C. 102 (b) as being anticipated by Nakacho et al (EP 0945478), is hereby expressly withdrawn.

The following rejections are being maintained.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakacho et al (EP 0 945 478) in view of Ida et al (US 6337031) or An et al (US 5028347).

The reference to Nakacho et al (EP 0 945 478) discloses the manufacture of a resin composition that may comprise a flame retardant, which may be a phosphazene compound, a thermoplastic resin, including polyamides and a modified polyphenylene ether (with or without a polystyrene resin) to produce a molded article. The employment

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of a polyamide, modified polyphenylene ether, styrene resin and modified styrene resins in combination is shown at page 10 paragraphs [0075] and [0076]. The reference teaches the inclusion of a phosphazene compound at page 3 (line 12) to page 6 (line 32), essentially identical to that instantly claimed. At page 4, paragraph 26, the reference teaches the compositional limitations to comprise (a) 100 parts by wt of resin, (b) 0.1 to 100 parts by wt of a flame retardant, and (c) 0.1 to 50 parts by wt of organic phosphorus compound. The reference teaches the inclusion of cyclic phenoxy phosphazene at page 33, claim 1. The inclusion of inorganic fillers is shown at page 10, line 39 to page 11, line 18, including glass fibers.

The reference to Nakacho et al does not mention a magnetic powder (of instant claims 10-12).

The patent to Ida et al (US 6,337,031) discloses a flame-retardant resin magnet material comprising a magnetic powder based on ferrite at column 2 (line 65) to column 3 (line 31) which may be employed with a polyamide resin. Note the Examples for this teaching, as well.

The reference to An et al (US 5,028,347) teaches the employment of a flame-retardant magnetic composite resin composition that may comprise a magnetic powder at column 9 (line 42) to column 10 (line 4). An et al show surface treatment of the magnetic powder as recited in claim 15 at column 3 (lines 28-45). The resin may be a polyamide, as taught at column 2 (lines 29 et seq.).

Since each of the references teach the use of a polyamide, adding what would be conventional additives thereto, it would therefore have been obvious to add to the

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composition of Nakacho et al, the magnetic powder as taught by Ida et al or An et al with the expectation of obtaining a molded article such as a magnet, having flame retardant properties as well as magnetic properties. Furthermore, An et al show at column 3 (lines 28-36), the surface treatment of the glass fibers. An artisan of ordinary skill in the art would know to include surface treated glass fibers in the flame retardant composition of Nakacho in order to improve dispersibility and thereby enhance mechanical strength and flowability.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakacho et al (EP 0 945 478) in view of Ida et al (US 6,337,031) or An et al (US 5,028,347) as applied to claims 1-15 above, and further in view of White et al (US 4,806,602).

The reference to White et al (US 4,806,602) describes the anhydride capping polyphenylene ether with carboxylic acid, which is the thrust of the reference. It would have been obvious to modify polyphenylene ether resin used in the flame retardant composition of Nakacho since such a modified resin is less susceptible to oxidative degradation. Such degradation leads to a composition becoming dark in color and brittle.

### ***Response to Arguments***

Applicant's arguments filed 22 August 2005 have been fully considered but they are not persuasive.

Applicants assert that the reference to Nakacho et al "contains no teaching or suggestion of a composition including a phosphazene compatibility enhancing resin...consisting essentially of a PPE-based resin, or a mixture of a PPE-based resin and a PS-based resin, in specific amounts, as required by the pending claims."

Applicants are attempting to apply a standard of 35 USC 102 for a rejection that has been made under 35 USC 103. The reference clearly shows a modified PPE resin at paragraph [0076] added in a mixture with a polyamide. That paragraph shows only a choice of five resins, not "a lengthy list." Further, the compositional limitations at paragraph [0082] for the flame retardant embraces that of the instant claims. The rejections were made under 35 USC 103 and not 35 USC 102. The amounts of the resins employed would certainly be within the skill of an artisan depending upon factors that may include cost and availability, as well as final product characteristics. Applicants have failed to show any unexpected results as drawn to this feature. Applicants are reminded that a reference is taken for its entirety and not for any isolated teachings that may be extracted, e.g. "working examples." The disclosure of the reference does not need to present a working example that includes the resins claimed since those resins are broadly disclosed in combination.

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued

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examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

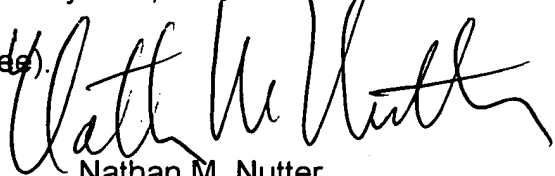
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 571-272-1076. The examiner can normally be reached on 9:30 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nathan M. Nutter  
Primary Examiner  
Art Unit 1711

nmn

14 November 2005